

COMMERCE GENERAL ARCHITECTURE

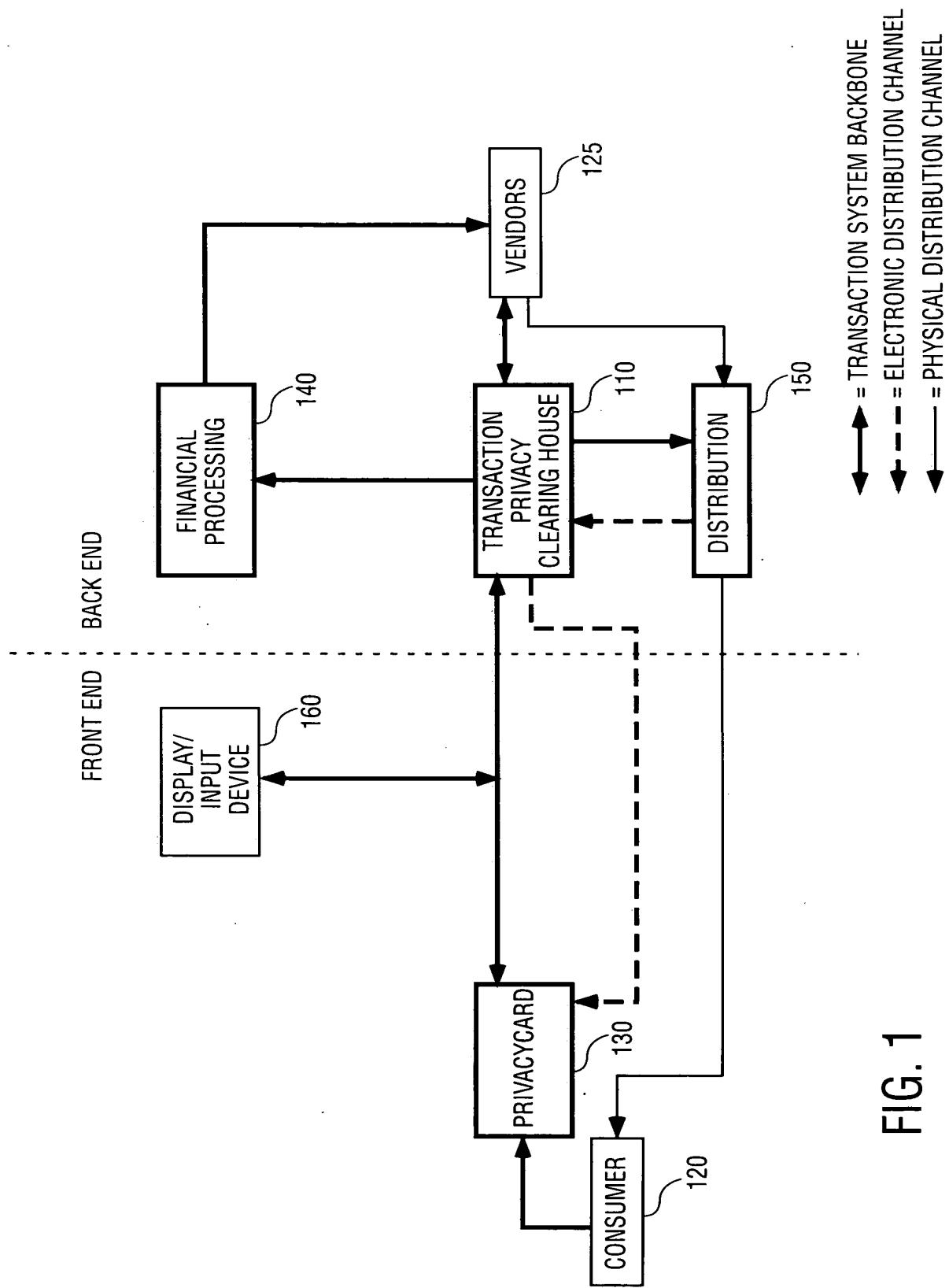


FIG. 1

COMMERCE GENERAL ARCHITECTURE - POS TERMINAL:

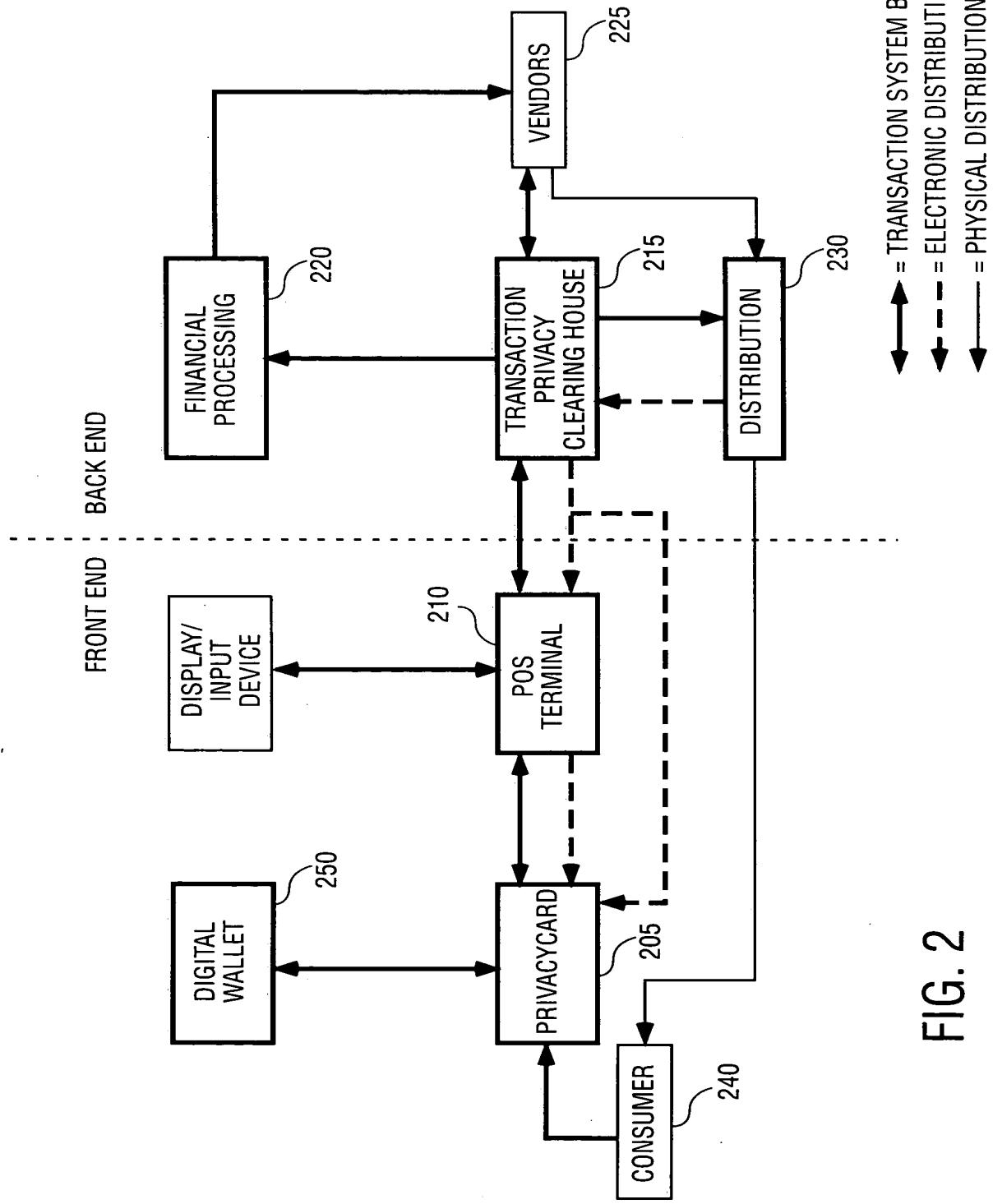


FIG. 2

COMMERCIAL IN-HOME ENVIRONMENT

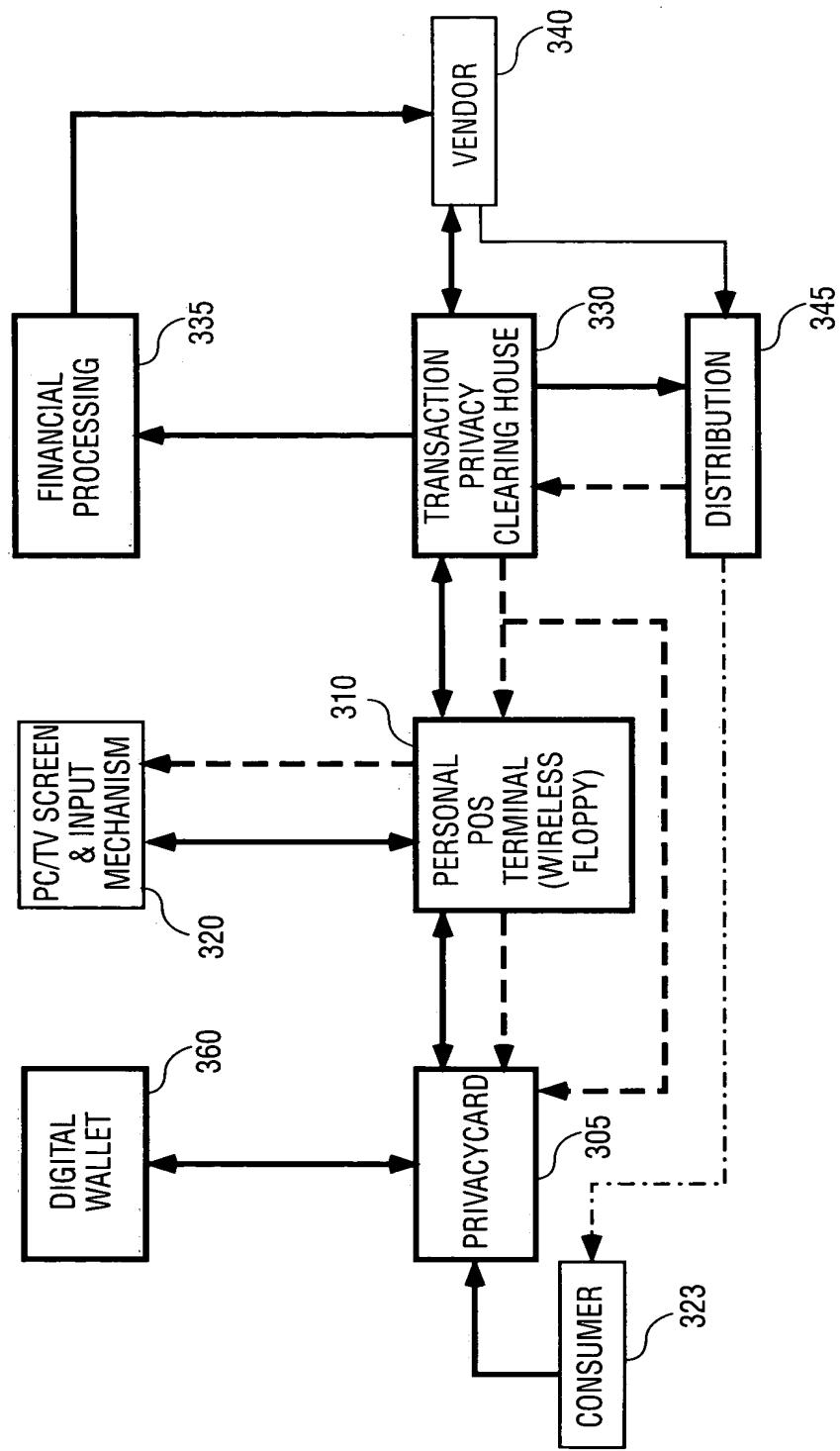


FIG. 3

IN-STORE RETAIL ENVIRONMENT

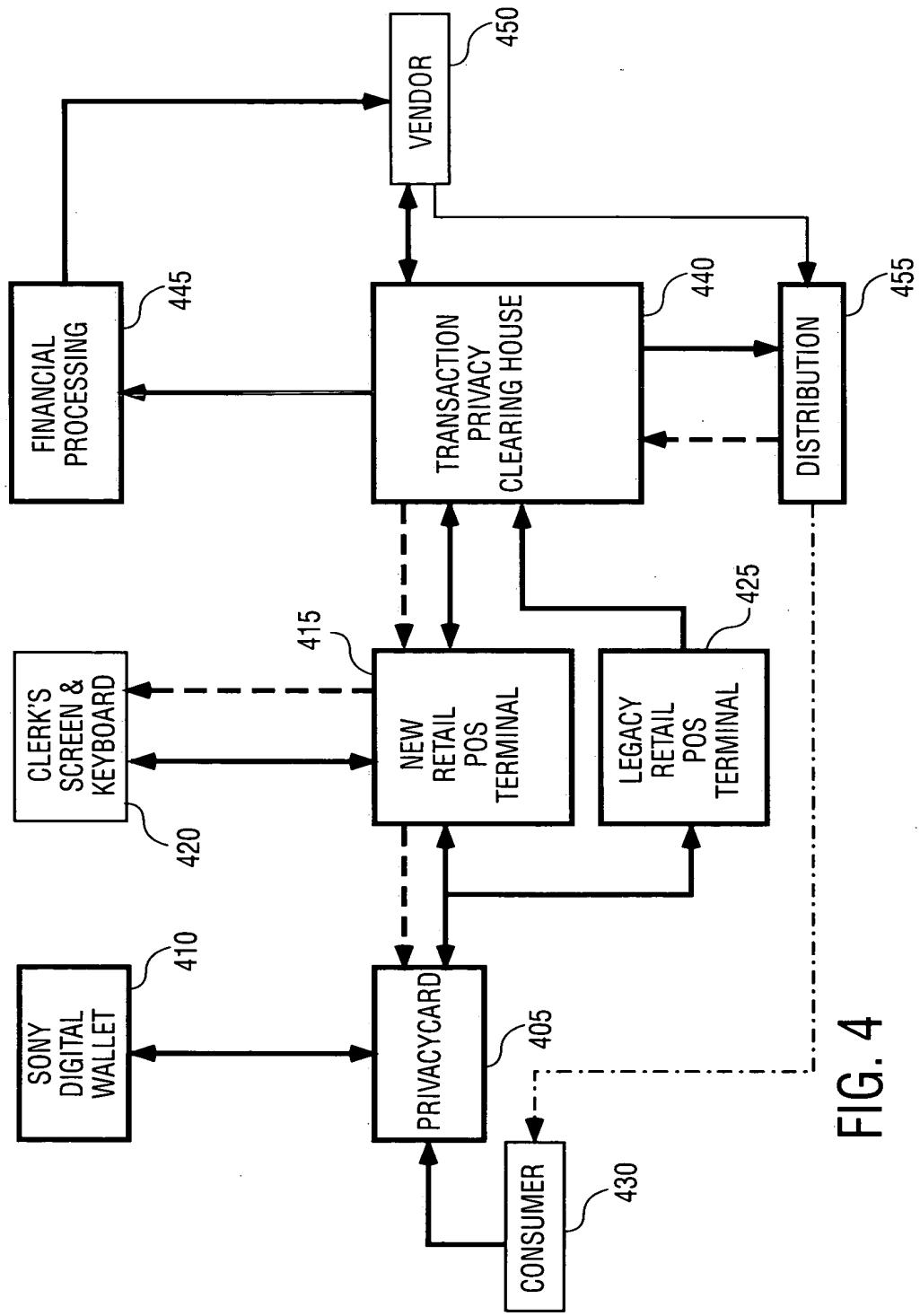
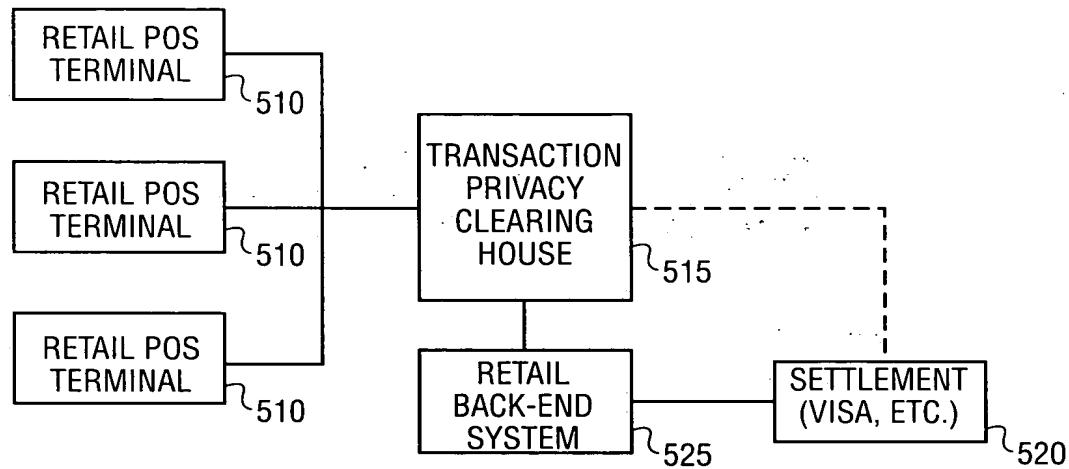
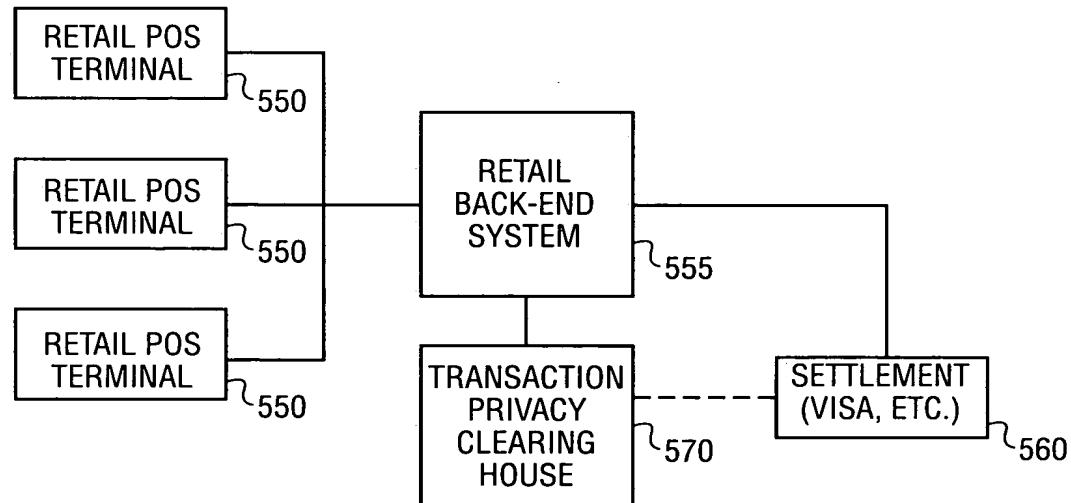


FIG. 4



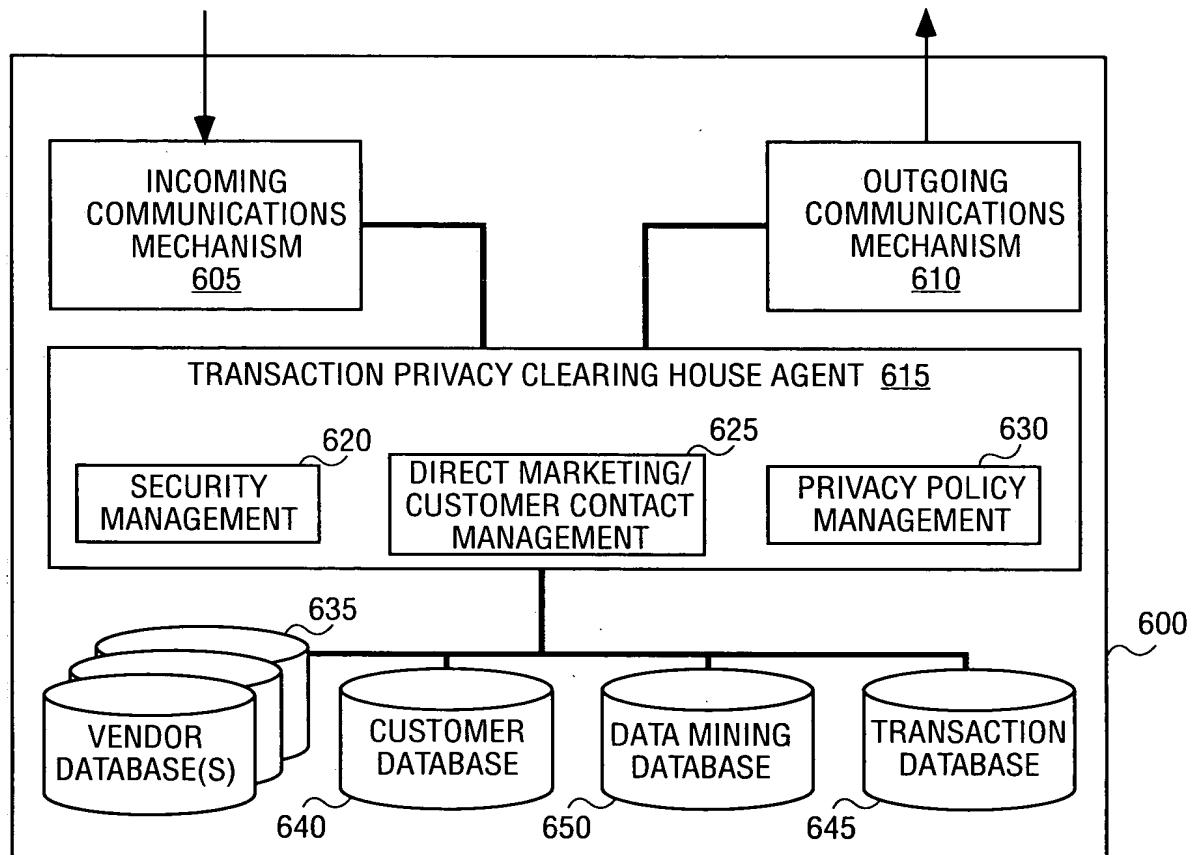
A RETAIL SYSTEM MODIFIED TO
SUPPORT THE INTERACTION OF LEGACY POS TERMINAL WITH
THE DIGITAL WALLET SYSTEM

FIG. 5A



AN ALTERNATIVE EMBODIMENT OF THE RETAIL SYSTEM
MODIFIED TO SUPPORT THE INTERACTION OF LEGACY POS
TERMINALS WITH THE DIGITAL WALLET SYSTEM

FIG. 5B



TRANSACTION PRIVACY CLEARING HOUSE: MAJOR COMPONENTS

FIG. 6

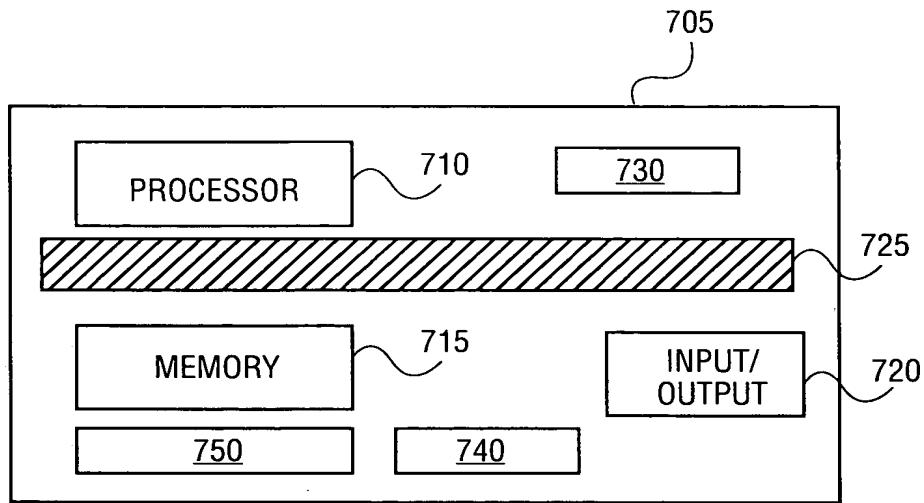


FIG. 7A

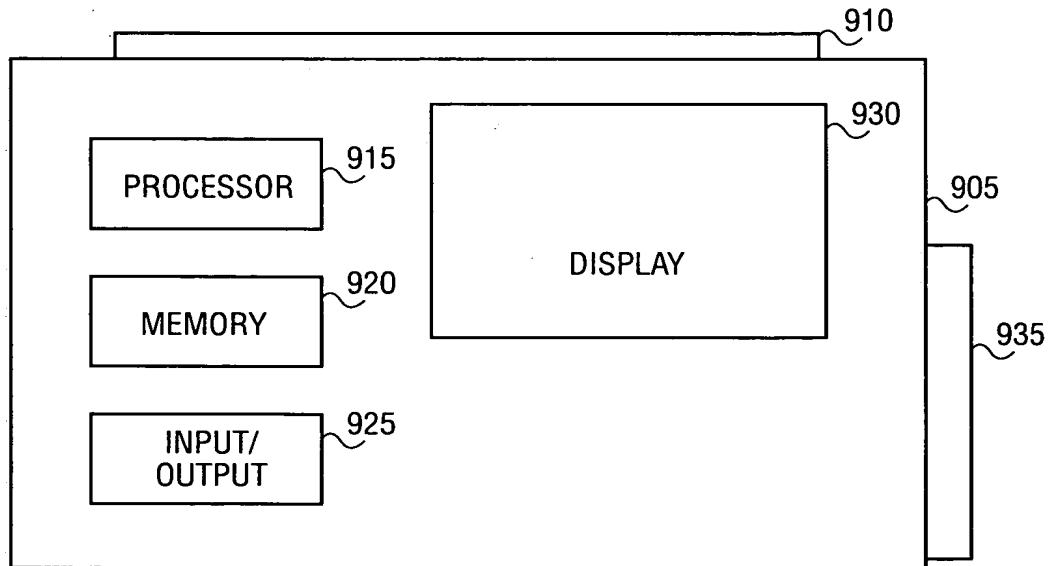


FIG. 9A

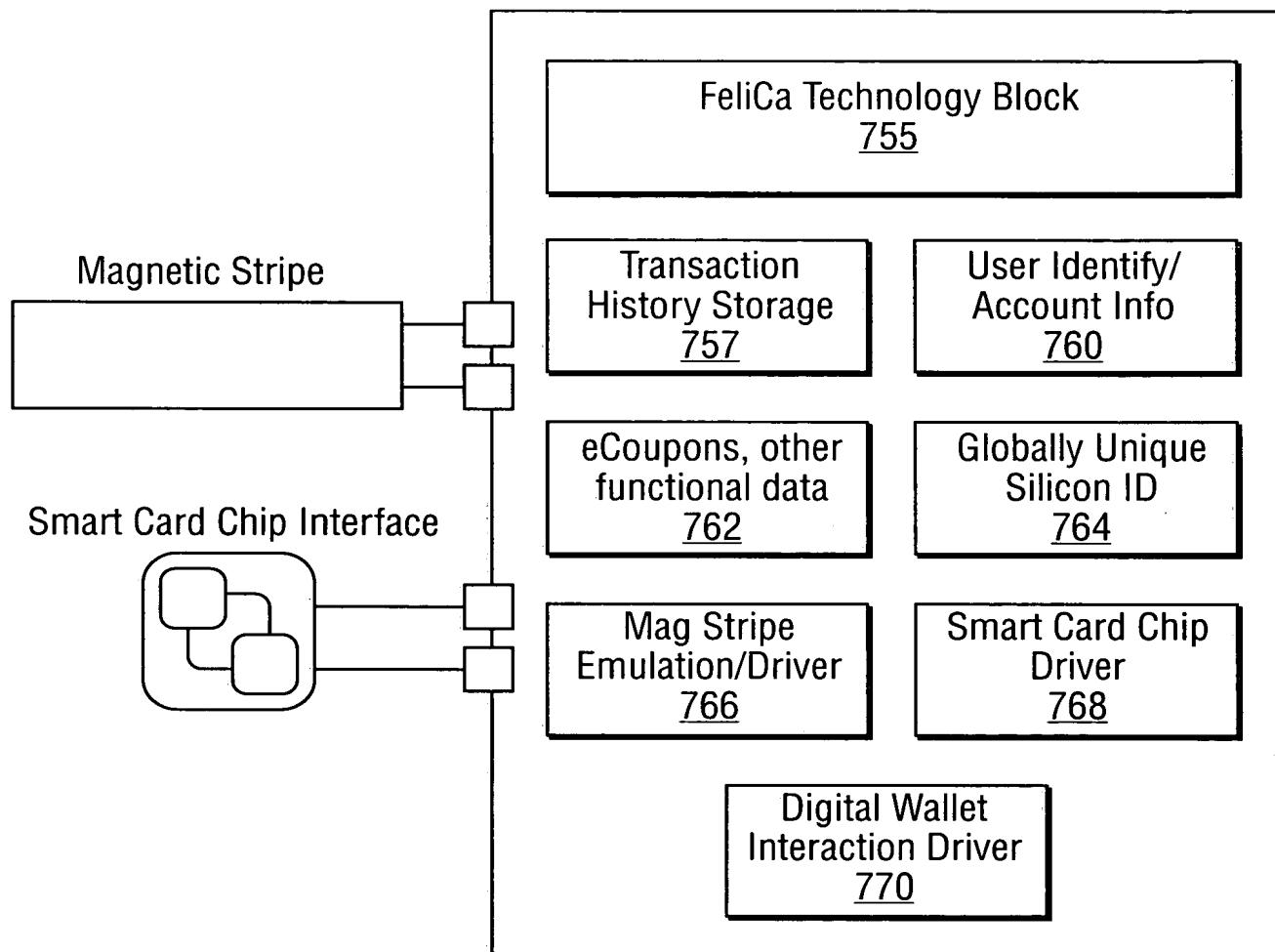


FIG. 7B

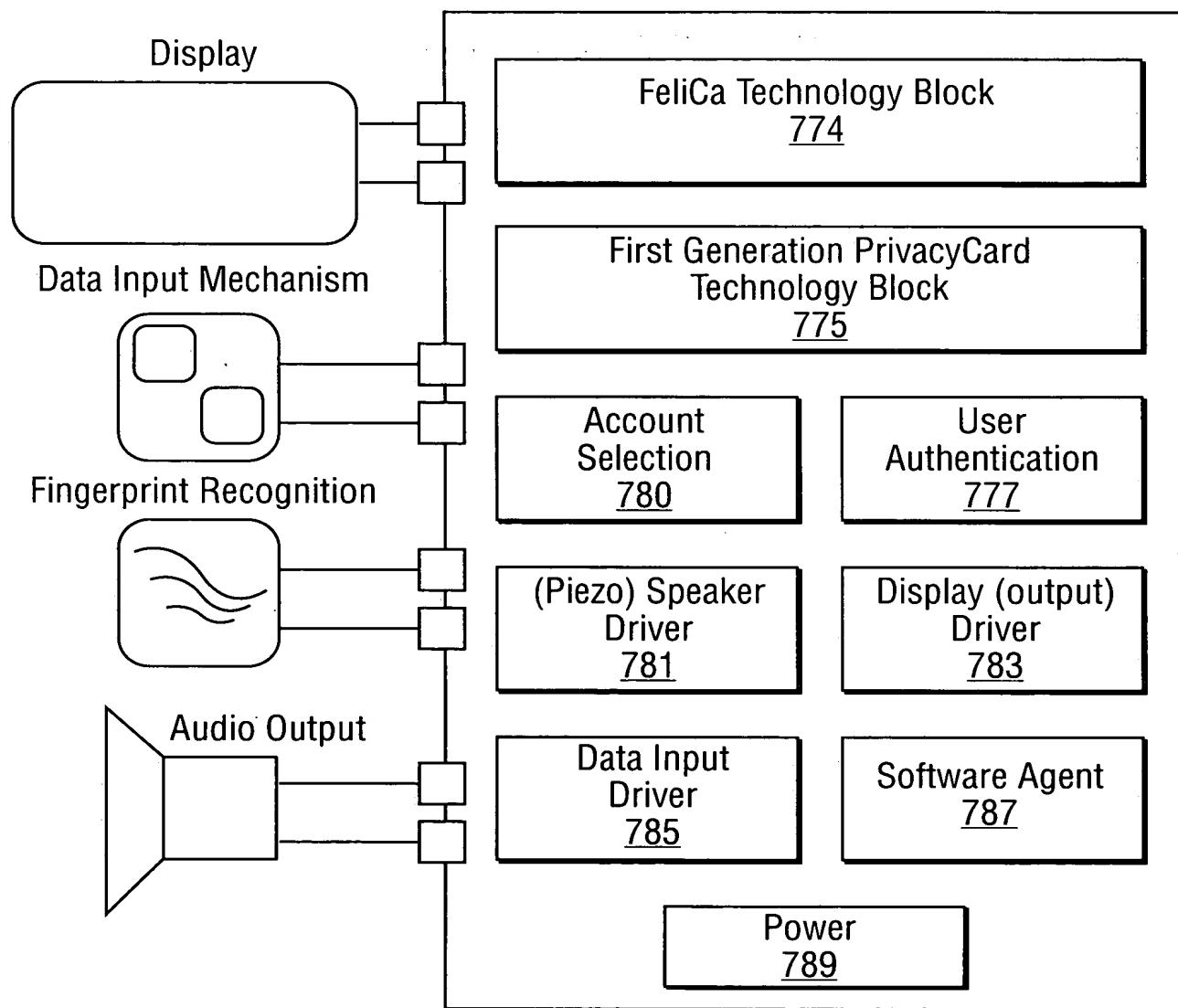
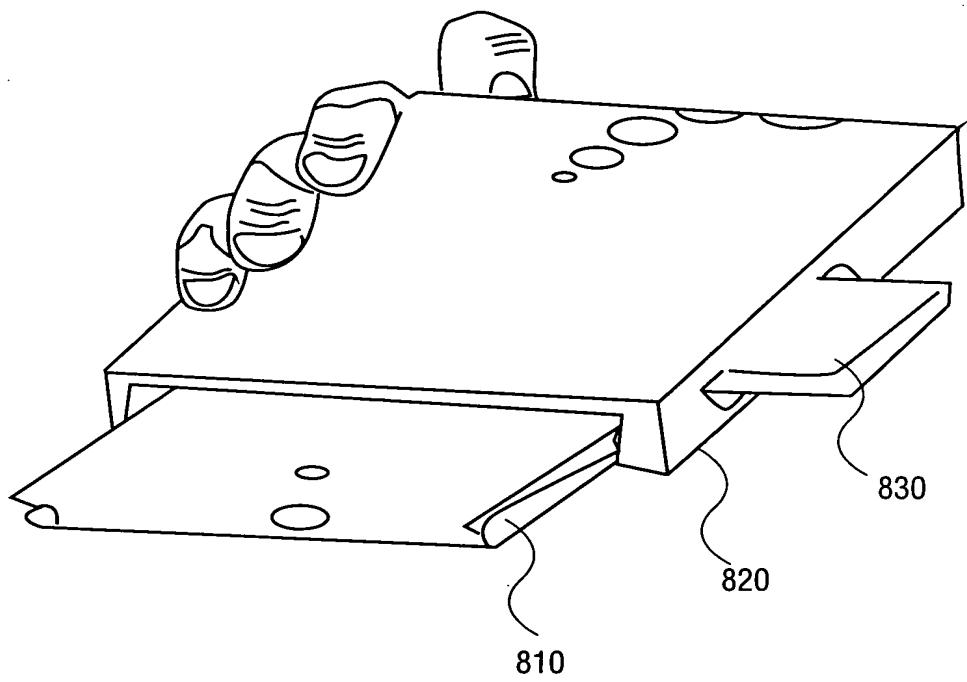


FIG. 7C



DIGITAL WALLET AND PRIVACY CARD

FIG. 8

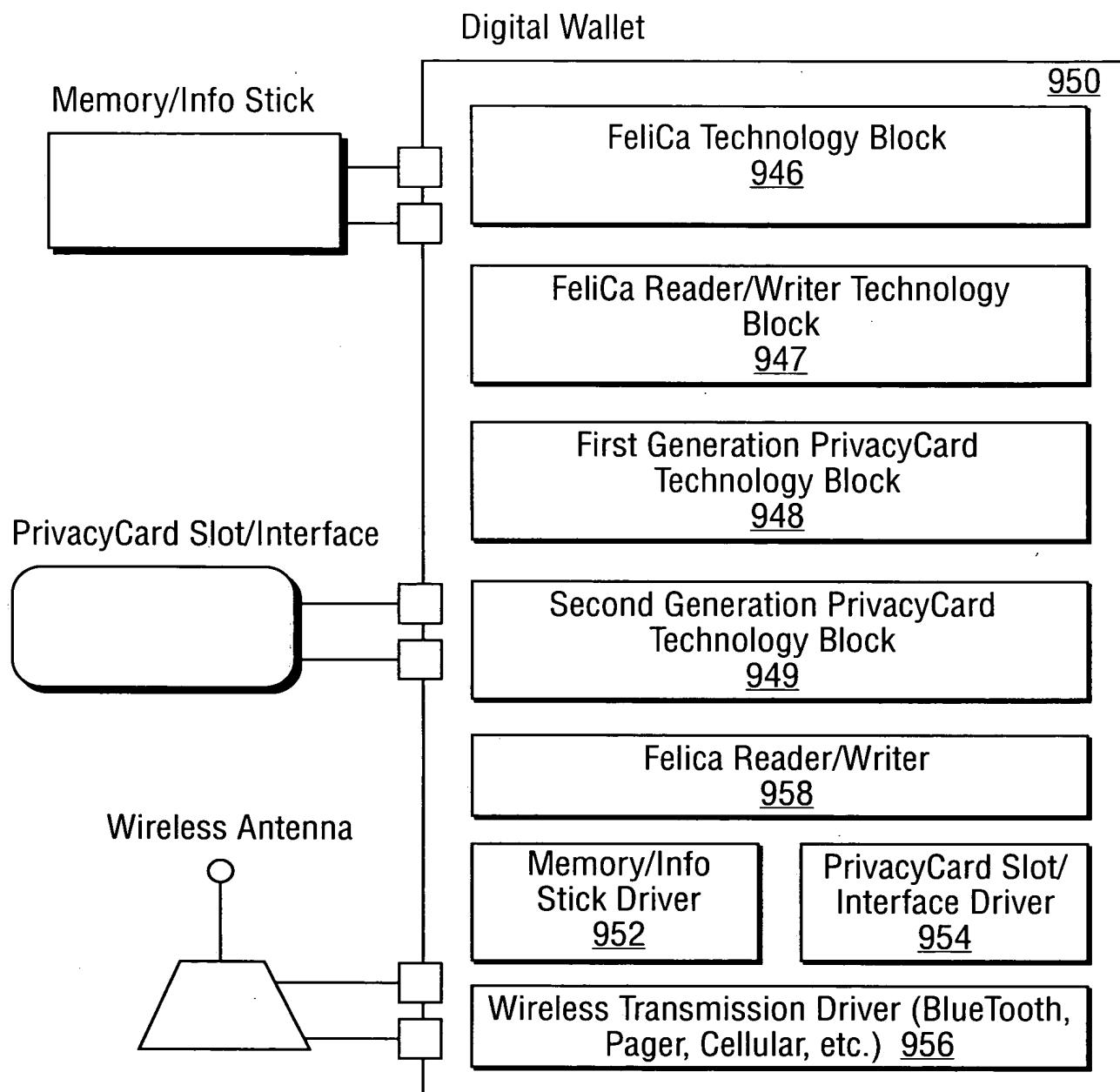


FIG. 9B

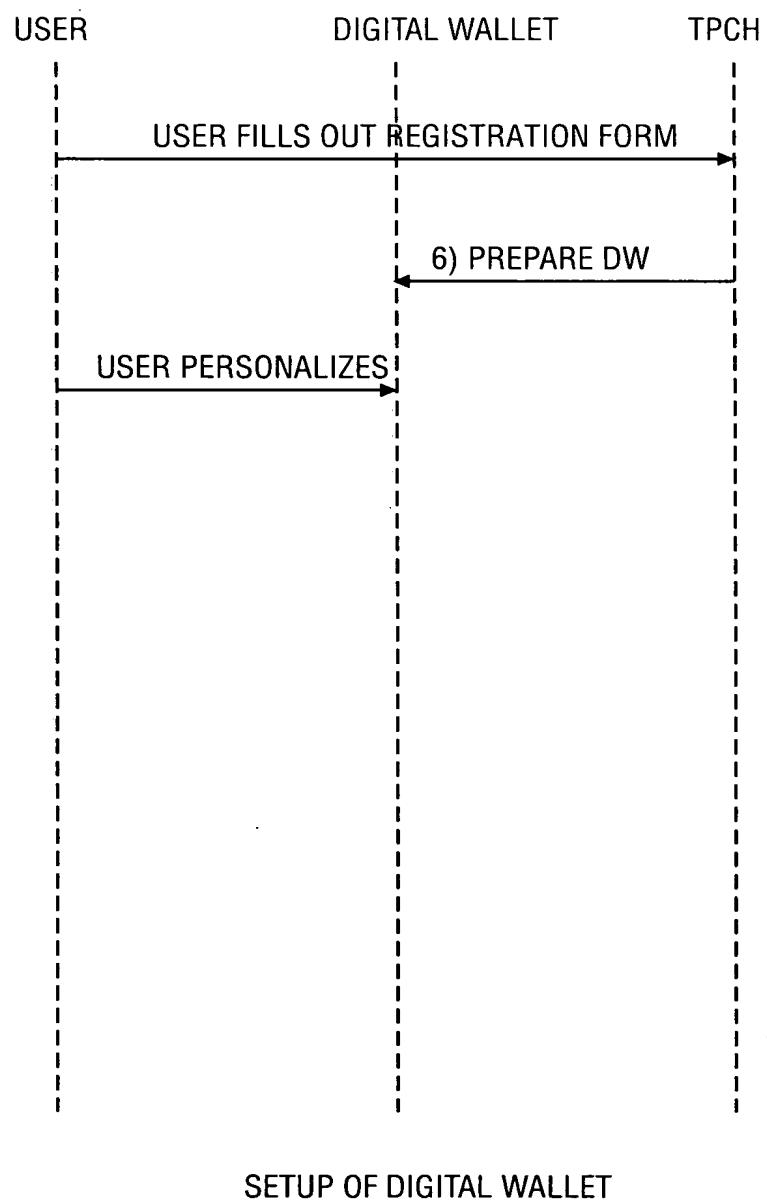


FIG. 10

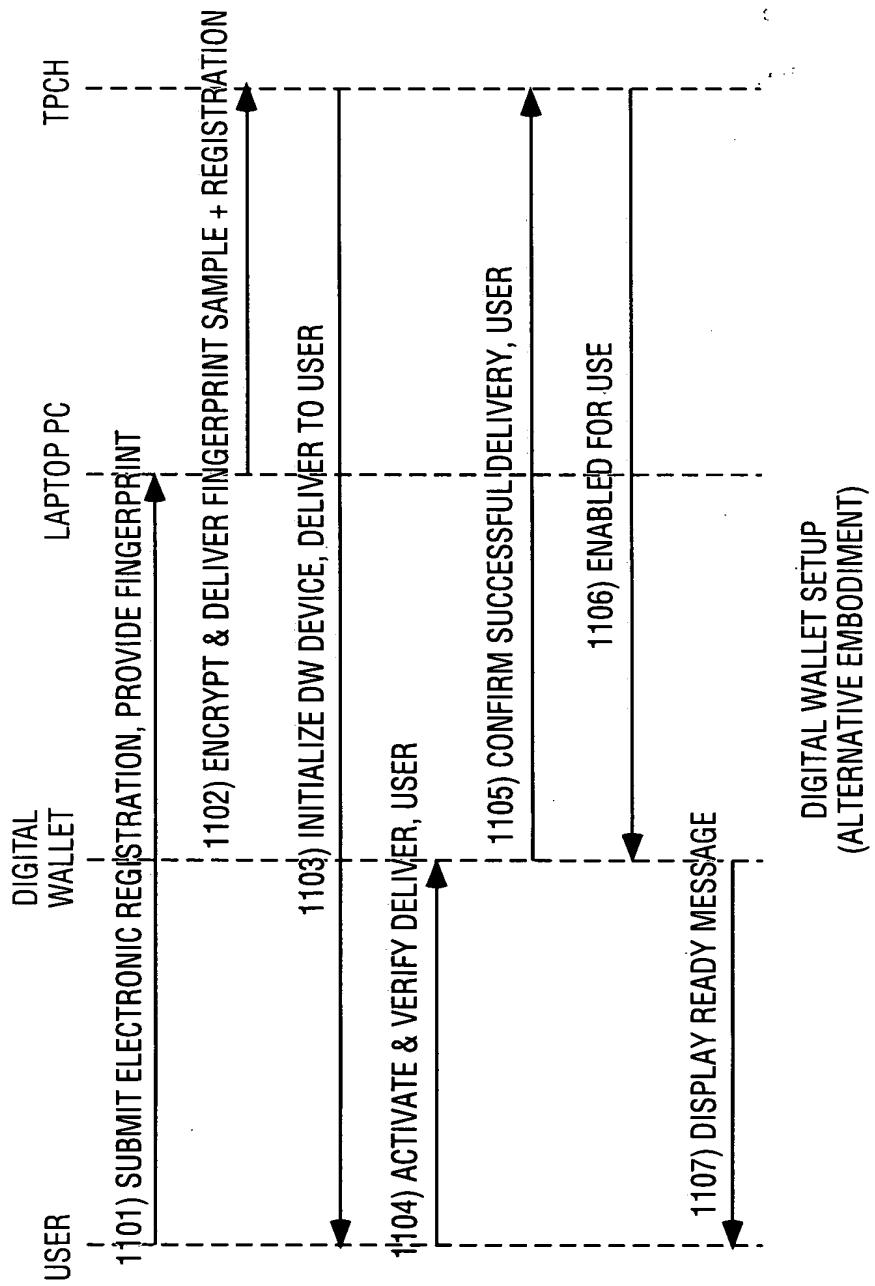
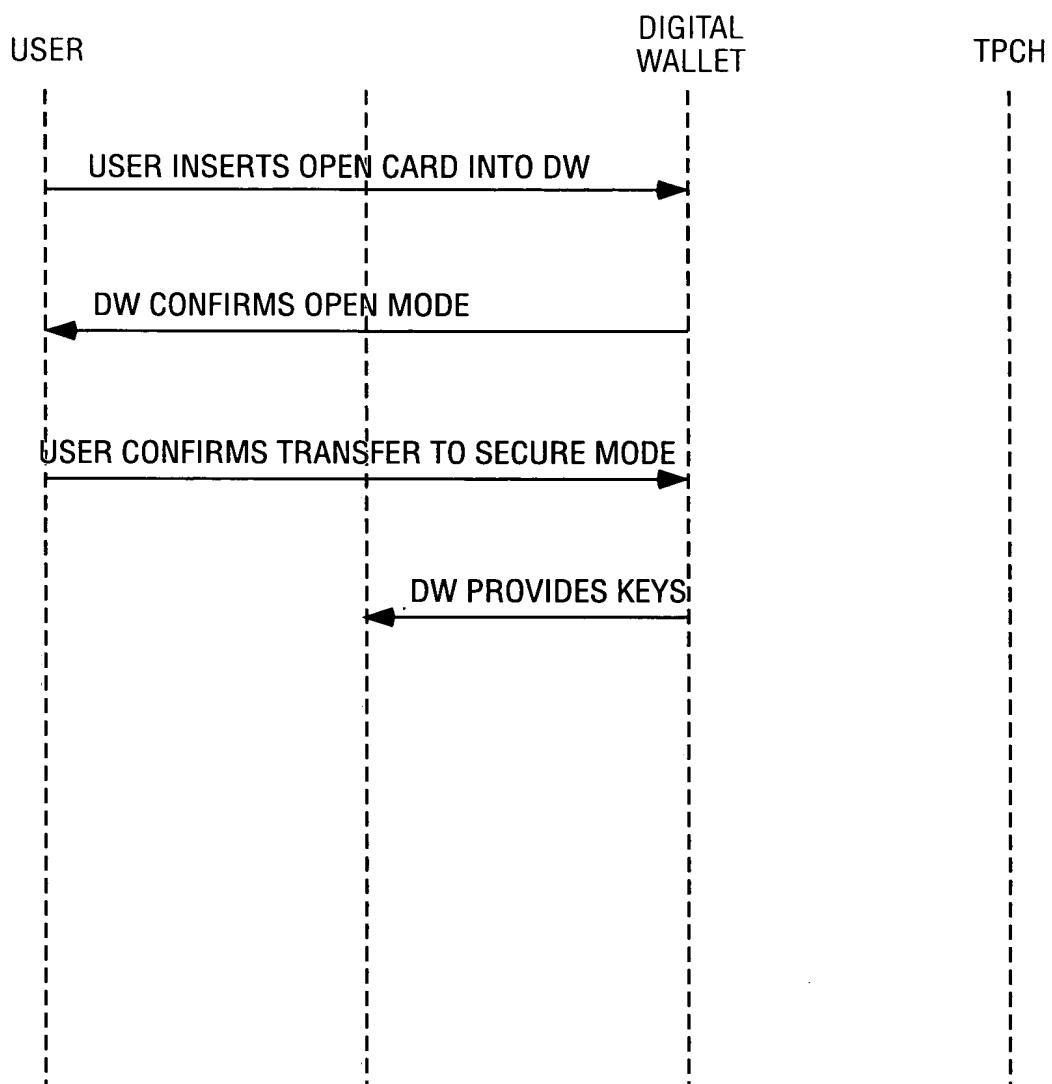
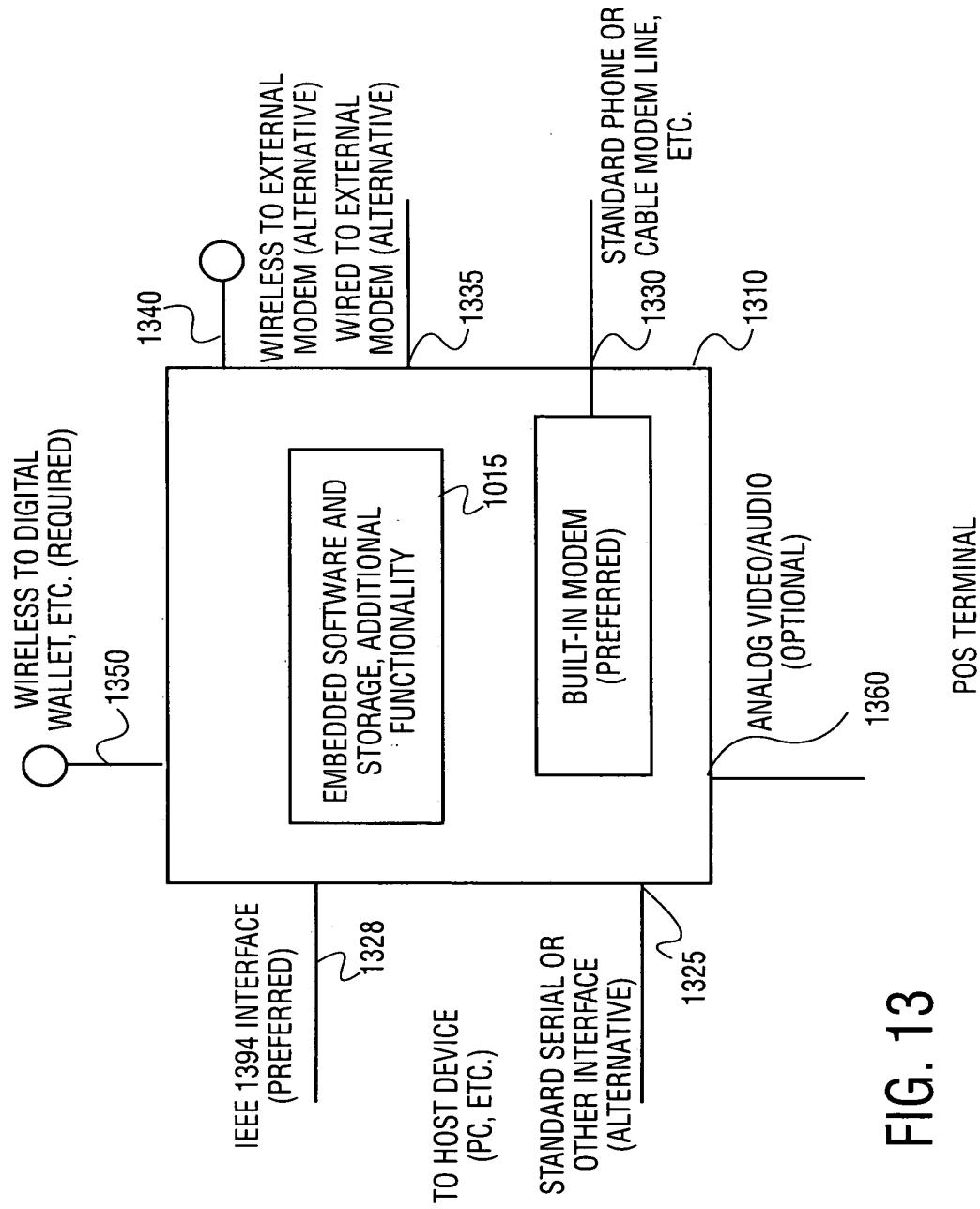


FIG. 11



CONVERSION OF CARD TO SECURE

FIG. 12



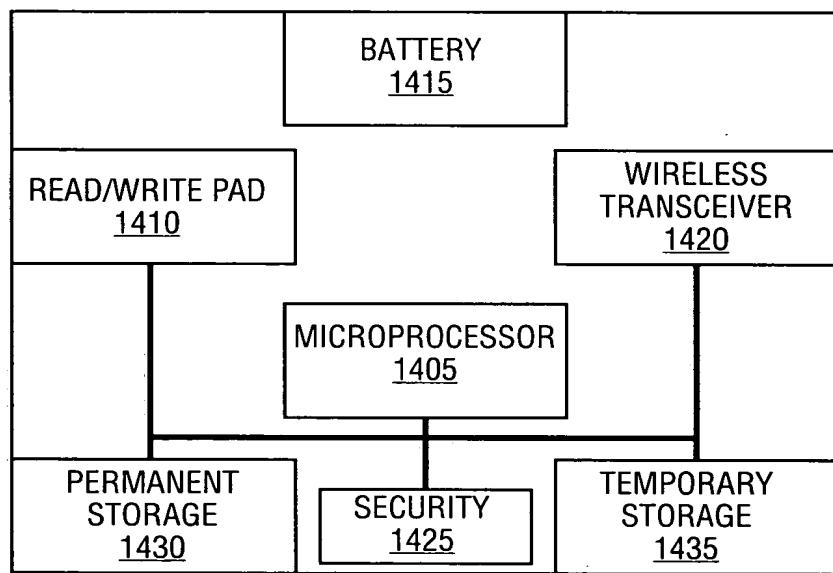


DIAGRAM OF THE MAJOR COMPONENTS OF THE
PERSONAL POS, SHOWING THE DATA/ADDRESS
BUS INTERCONNECT

FIG. 14

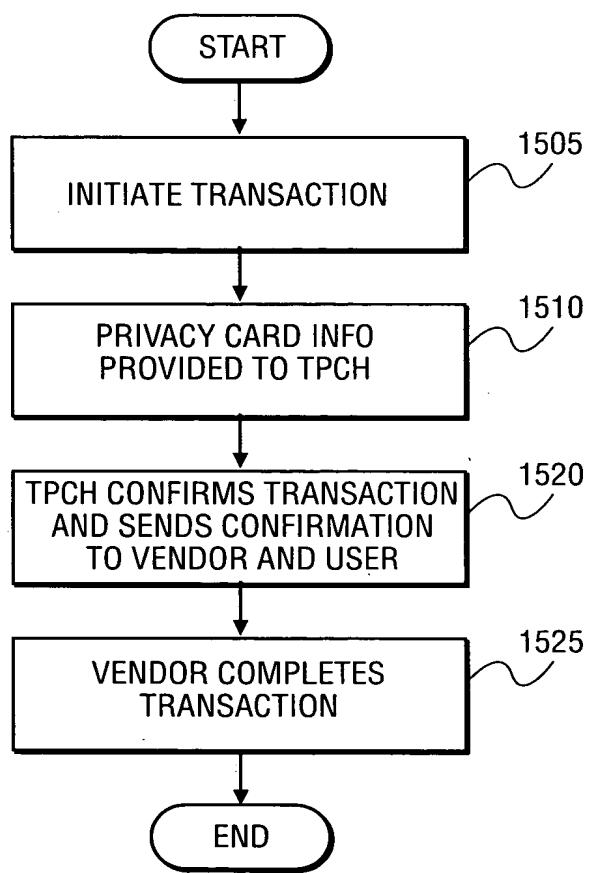


FIG. 15

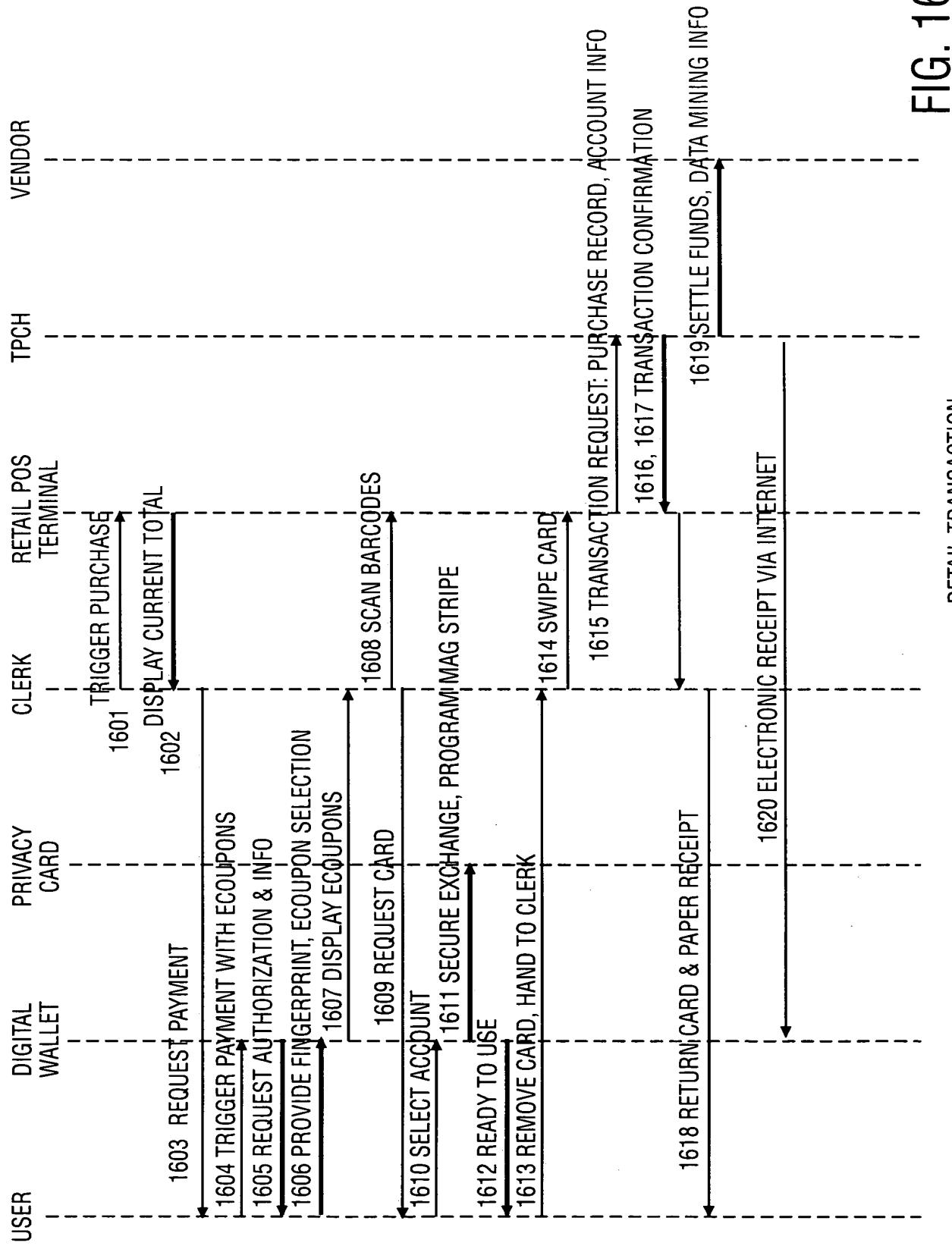


FIG. 16

RETAIL TRANSACTION

FIG. 17

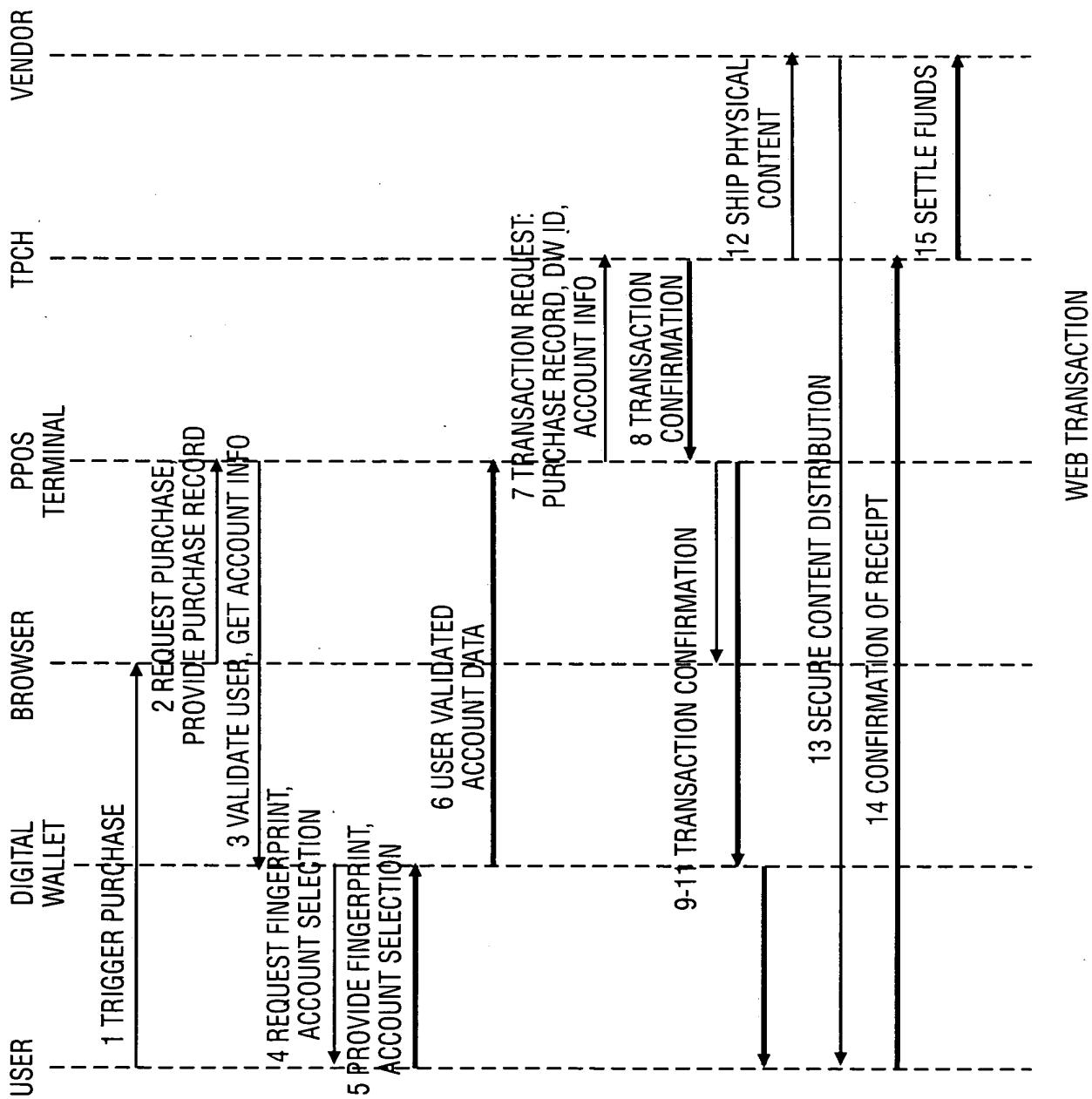
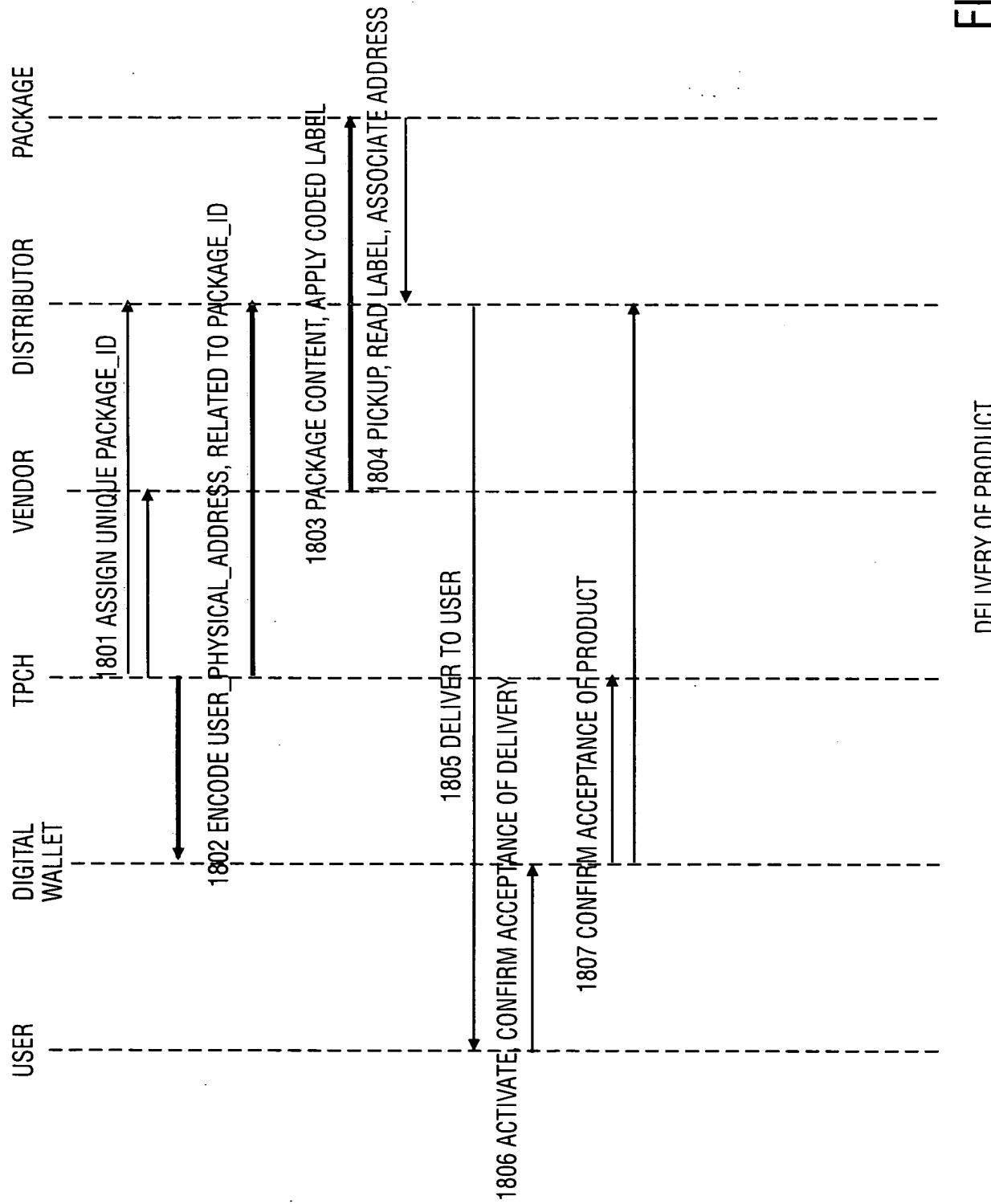


FIG. 18



DELIVERY OF PRODUCT

FIG. 19

RETURN OF PRODUCT

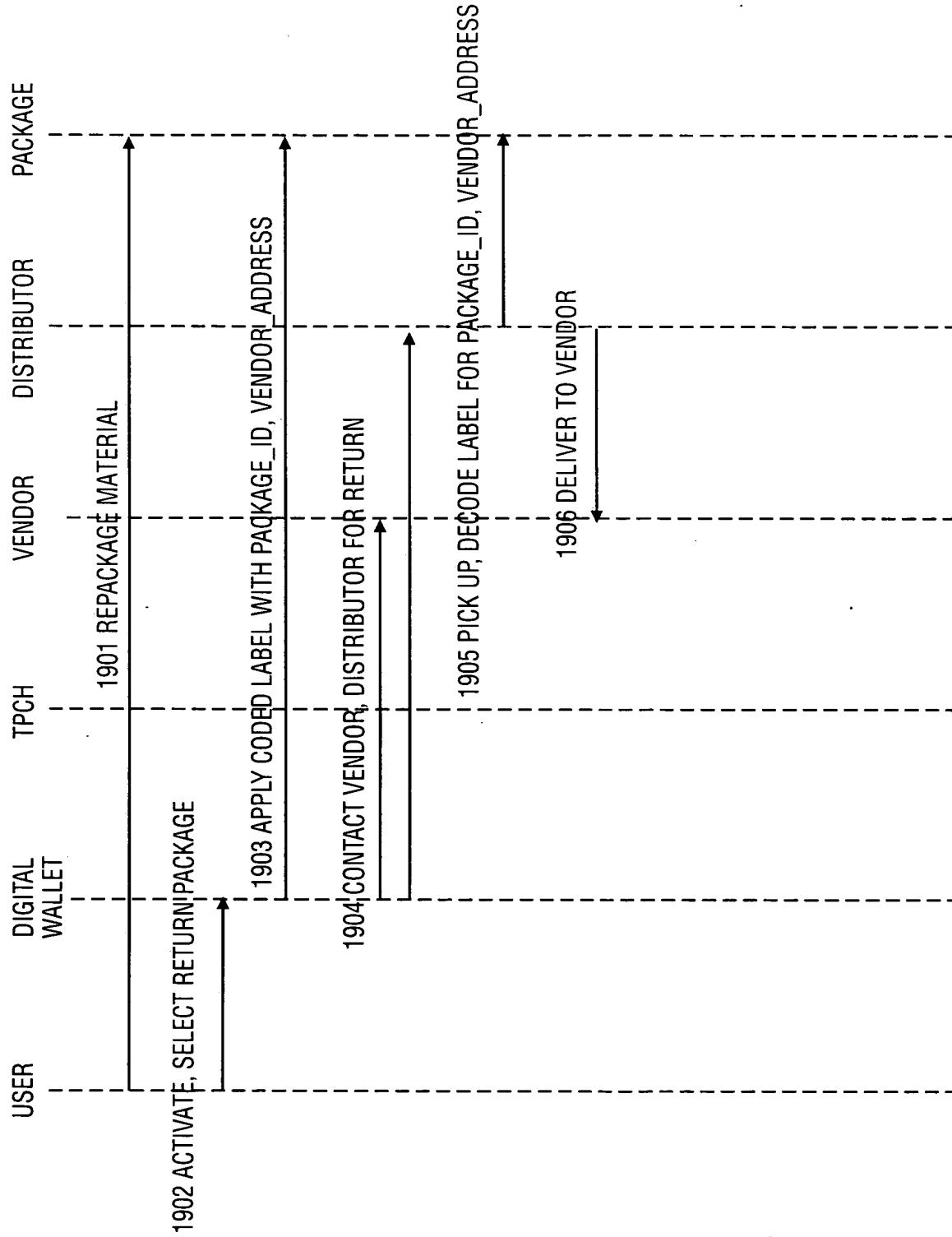
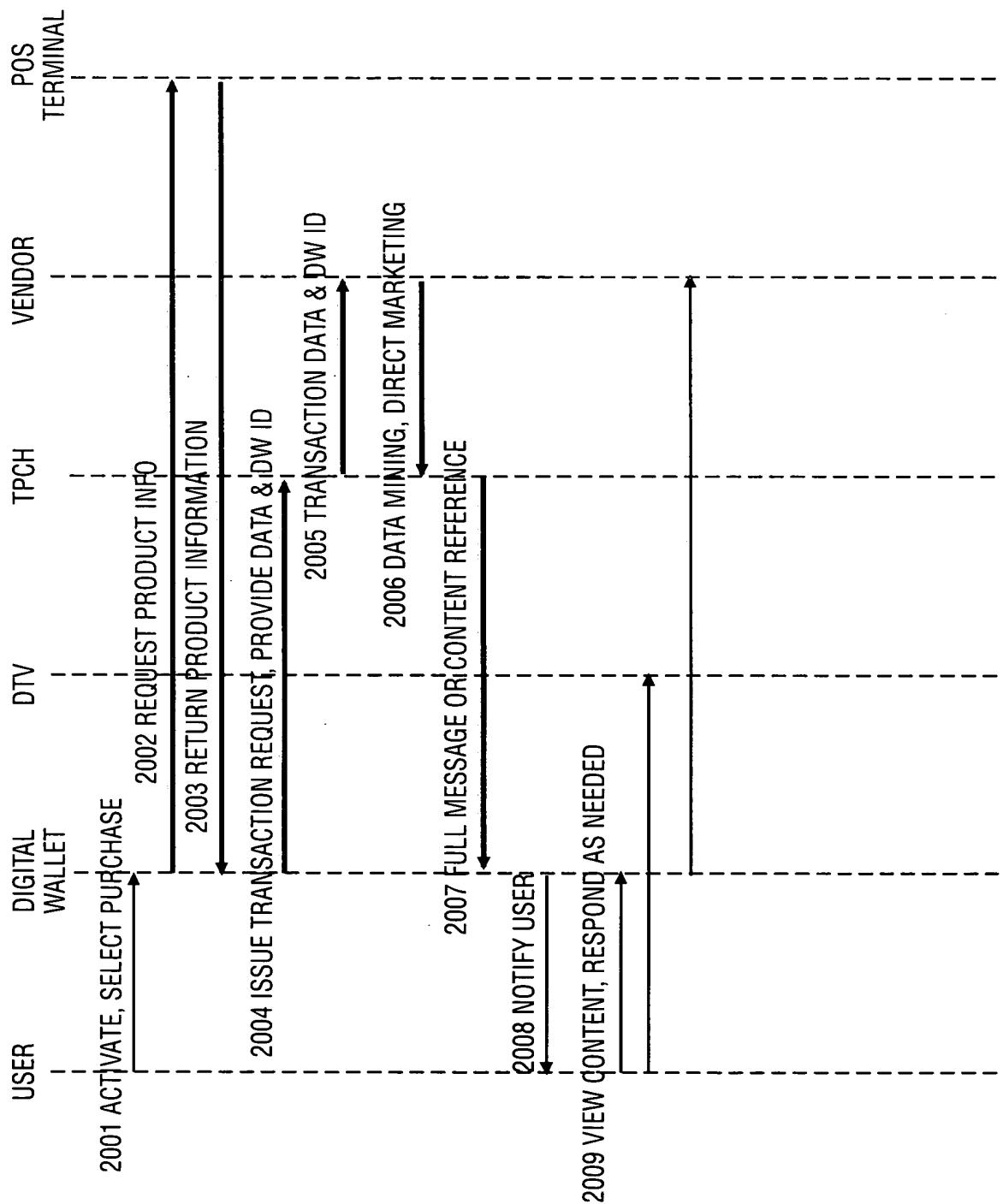


FIG. 20

DATA MINING



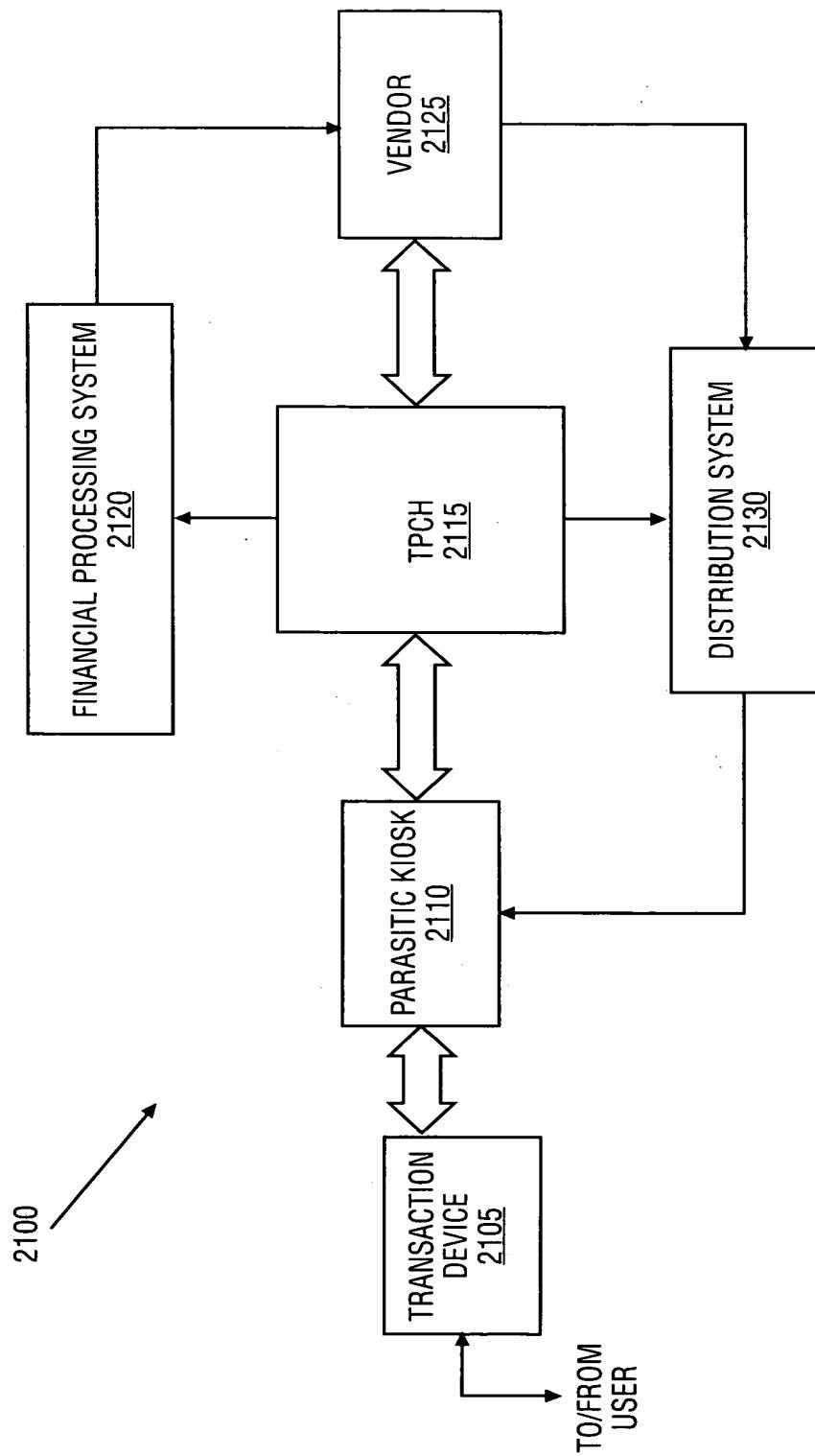


FIG. 21

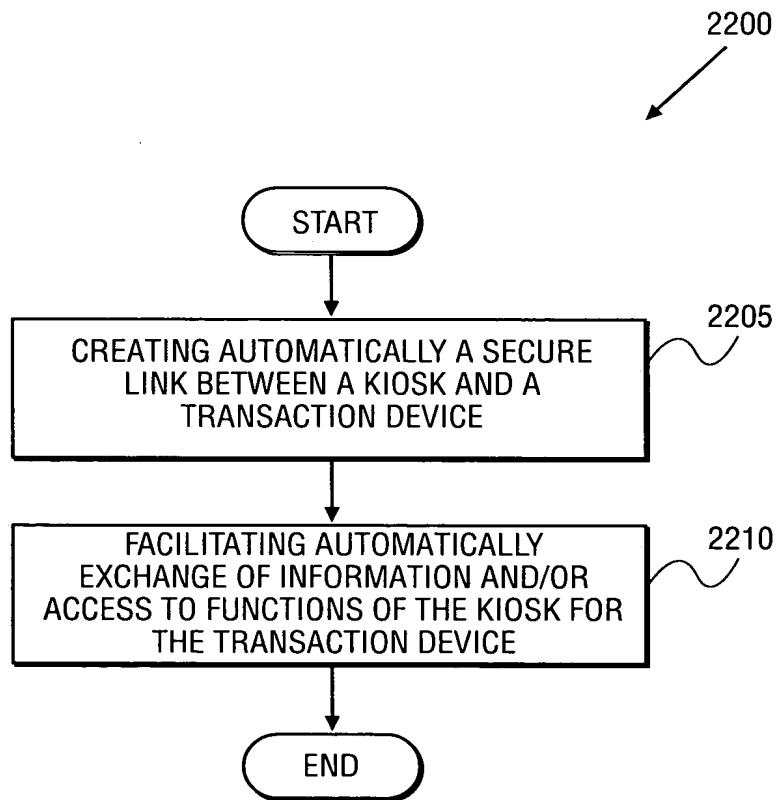


FIG. 22

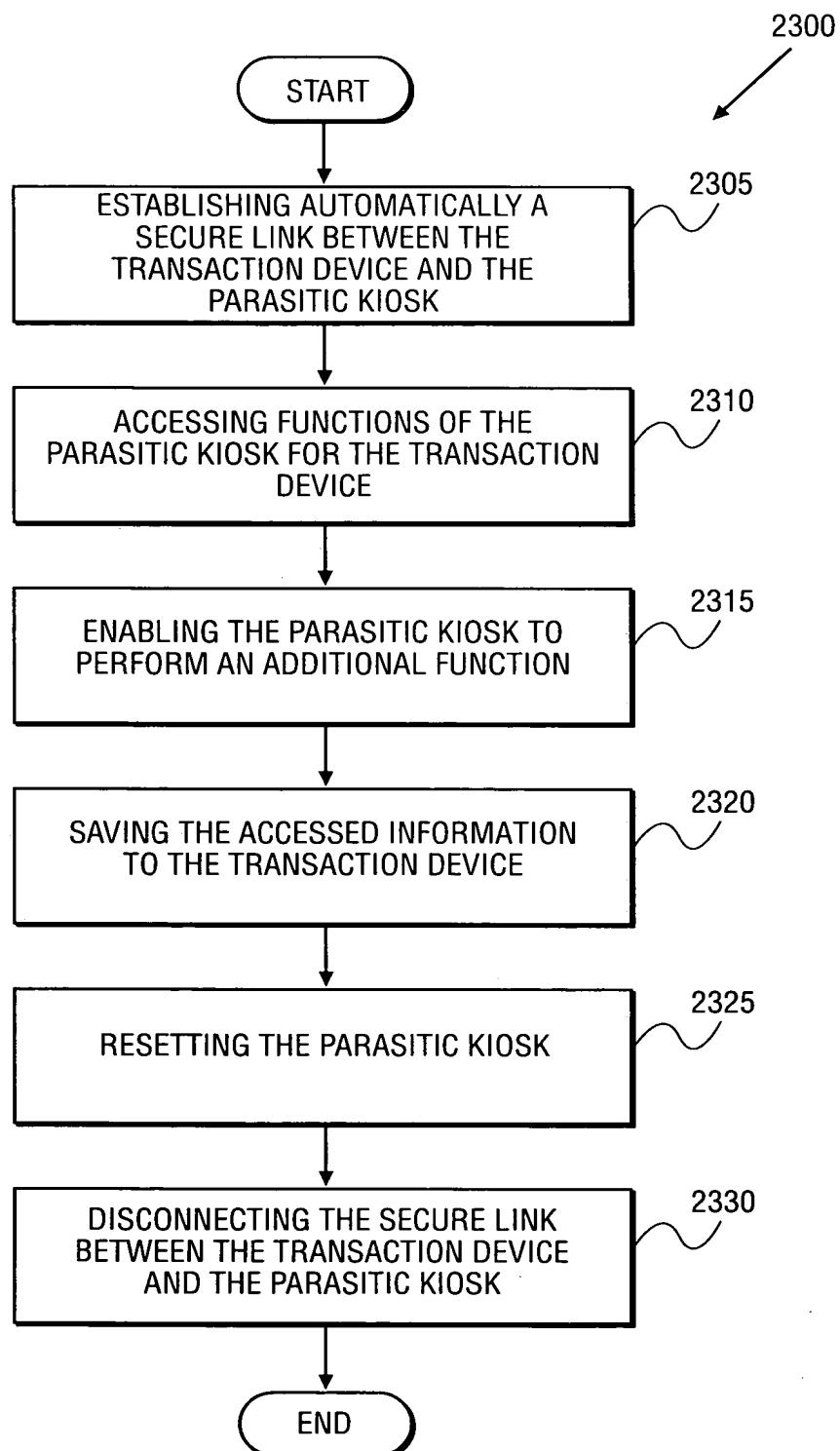


FIG. 23

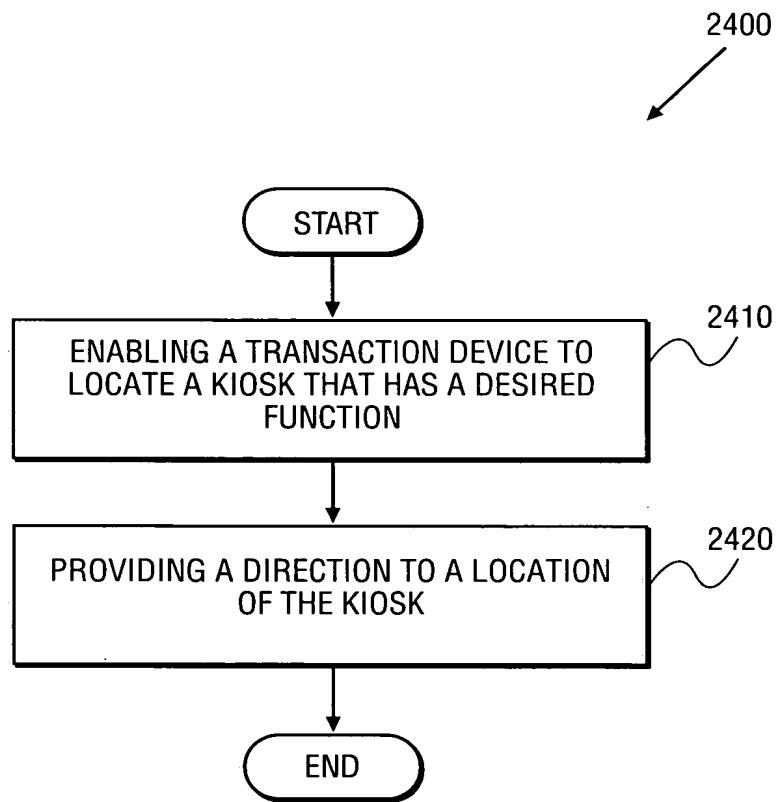


FIG. 24